

SAFETY ALERT

The USASC recently conducted an accident investigation of an airborne fatality. This jump was a day, mass tactical combat equipment jump from 800 feet AGL using a T-10C. A broken static line (MIL-W-4088, Type VIII, class 2, webbing, textile, woven nylon.) caused the jumper to experience a total malfunction. A ten-year review of the USASC database revealed six additional airborne accidents involving broken static lines. After reviewing these reports, the following trends are provided for your information and consideration.

- Six of the jumpers exited from a C-130 and one exited from a C-141.
- All breaks in these static lines occurred between 39 - 48 inches from the anchor line cable.
- Five of these paratroopers were jumping equipment that weighed more than their individual body weight, but were within the allowable weight of 360 pounds as established in FM 57-220.
- Six of these jumpers had poor or weak exits and became entangled with equipment.

A technical analysis by Natick determined that all of these static lines were properly constructed, showed no evidence of prejump damage, and passed all destructive/pull tension tests.

An inspection of other (unbroken) static lines from the last two accidents showed similar markings consistent with those found on the broken/ruptured static lines.

Paratroopers jumping with equipment weighing more than their own body weight have a greater potential for weak exits. Weak exits will induce tumbling, rolling, and spinning immediately outside the paratroop door. This can cause increased static line surface contact (friction) with the trail edge of the paratroop door which increases the chance of becoming entangled with equipment. Additionally, weak exits adversely affect static line serviceability and attrition rates.

Jumpmasters must ruthlessly enforce standards during performance oriented training and ensure that all jumpers are briefed concerning the importance of proper exits from any aircraft. Jumpers exiting a C-130/141 should exit across the center of the jump platform, placing the trail foot as near to the outer edge of the platform as possible before exiting and becoming airborne. They must maintain their momentum after making the pivot to turn towards the door and execute their first point of performance rapidly, and in accordance with the current standard for static line parachuting. Additionally, the LBE and other items of equipment must be secured close to the jumper. Loose and flapping items will exacerbate spinning and tumbling and could cause entanglement with equipment. Proper execution of the current exit standards supports safe operations.

Finally, commanders should examine the individual loads that soldiers are carrying and make sound risk management decisions on the benefits and hazards associated with airborne operations.

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